

AD-A238 603



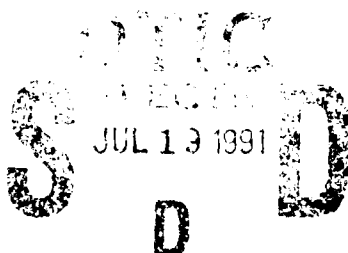
New
England
Deaconess
Hospital

Department of Medicine
Division of Hematology and Oncology
Laboratory of Hematology and Oncology
P.O. Box 347
Boston, MA 02115
(617) 221-3477

Harvard
Medical
School



August 17, 1990



August 17, 1990

A.J. Melaragno
Captain, Medical Corps
United States Navy
Director of Research and Development
National Naval Medical Center
Bethesda, Maryland 20814-5044

RE: Status Report for Grant # N00014-90-J-1847
Entitled "Development of Hematopoietic Growth Factors
for Use in Military Personnel"

Dear Dr. Melaragno:

This grant was started on April 15, 1990. The present
report delineates progress through May 31, 1990.

Project I: Human Erythropoietin

Prior to the start date of this grant, we were able to
initiate some of the proposed studies on a very small scale. We
have now begun to expand these studies as delineated in the grant
proposal. Specifically, we have developed seven mutants of human
erythropoietin in order to identify the active site of the
hormone. Mutation of amino acids 99-109 of the hormone
drastically alters the hormone's biological activity. Our
preliminary conclusion is that amino acids 99-109 are very
important for biological activity. We are now initiating a new
series of mutations designed to focus on individual amino acids
in this domain. The goal of these studies is to design new
erythropoietin molecules with increased biological activity in
vivo.

RECEIVED
1 AUG 21 1990
HARVARD MEDICAL SCHOOL
LIBRARY

81 7 10

91-05631

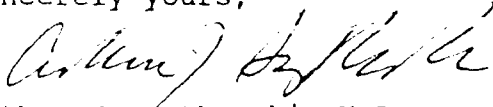


Status Report Grant # N00014-90-J-1847
August 17, 1990
Page 2

Project II: Erythroid Burst Promoting Activity

The goal of this project is to purify the B cell derived burst promoting activity (B-BPA) growth factor in order to obtain amino acid sequence, clone and express the gene, and initiate in vivo trials of this agent. We have begun to develop an animal model for the human B-BPA by testing conditioned medium from lymphocyte cultures of mice. At present we are developing the in vitro assays of mouse erythroid progenitor cells necessary to measure murine B-BPA. As soon as we are confident in our ability to carry out these assays, we will be able to begin to identify and characterize murine and other animal B-BPAs and initiate a purification program.

Sincerely yours,



Arthur J. Sytkowski, M.D.

AJS:rck

cc: Dr. Feldman
Research Administration

A-1